

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,759	11/09/2001	Kevin Moore	BSW.009	5649

7590 08/06/2004

VOLENTINE FRANCOS, P.L.L.C.
SUITE 150
12200 SUNRISE VALLEY DRIVE
RESTON, VA 20191

EXAMINER

RAO, ANAND SHASHIKANT

ART UNIT	PAPER NUMBER
----------	--------------

2613

DATE MAILED: 08/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/986,759

Applicant(s)

MOORE, KEVIN

Examiner

Andy S. Rao

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4-5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 2613

3. Claims 1-11 is rejected under 35 U.S.C. 102(e) as being anticipated by Chang et al., (hereinafter referred to as "Chang").

Chang discloses a method of generating a transition template suitable for insertion (Chang: figure 2) between a past reference picture and a future reference picture in a compressed digital data stream (Chang: column 7, lines 5-22), the method including the steps of: generating a series of transition pictures including a first transition picture and a last transition picture wherein each transition picture includes a series of rows of macroblocks (Chang: column 12, lines 35-45), each row including a first macroblock and a last macroblock (Chang: column 7, lines 60-67; column 8, lines 1-5); designating at least some of the macroblocks within each transition picture as either first predefined transition macroblocks or second predefined macroblocks (Chang: column 13, lines 15-28); designating a boundary between any first predefined transition macroblocks and neighboring second predefined transition macroblocks as a part of transition boundary (Chang: column 12, lines 43-67; column 13, lines 1-14); designating all or almost all of the macroblocks in the first transition picture as first predefined transition macroblocks (Chang: column 12, lines 15-37); for each new transition picture: copying a previous transition picture to form the next synthesized picture (Chang: column 13, lines 35-43); changing some the first predefined transition macroblocks in the new transition picture to second predefined transition macroblocks so as to change the position of the transition boundary (Chang: column 13, lines 43-60); and continuing to copy and change pictures until the most recently created transition picture consists entirely or almost entirely of the second predefined transition macroblocks (Chang: column 12, lines 50-57), as in claim 1.

Art Unit: 2613

Regarding claims 2-3, the method includes having the first and second predefined transition macroblocks include one or more of: past copy macroblocks which copy a from a past reference picture (Chang: column 14, lines 13-21); future copy macroblocks which copy from a future reference picture (Chang: column 14, lines 22-27); merge macroblocks which average from the past and further reference pictures (Chang: column 13, lines 43-50); offset copy macroblocks which reference the past reference picture (Chang: column 14, lines 13-21; column 13, lines 8-10); offset copy macroblocks which reference the future reference picture future (Chang: column 14, lines 22-27); fading macroblocks which reference a future reference picture and add a non-zero intensity offset to increase or decrease its intensity (Chang: column 8, lines 60-65; column 14, lines 22-27); past fading macroblocks which reference a past reference picture and add a non-zero intensity offset to increase or decrease its intensity (Chang: column 60-65; column 14, lines 13-21), as in the claims.

Chang discloses a transition template suitable for insertion (Chang: figure 2) between a past reference picture and a future reference picture in a compressed digital data stream (Chang: column 7, lines 5-22), the template including: a series of transition pictures wherein each transition picture includes a series of rows of macroblocks (Chang: column 12, lines 35-45), each row including a first macroblock and a last macroblock (Chang: column 7, lines 60-67; column 8, lines 1-5); wherein at least some of the macroblocks within each transition picture are first predefined transition macroblocks (Chang: column 13, lines 15-28); wherein said predefined transition macroblocks are arranged in said transition pictures (Chang: column 13, lines 43-60); so as to give the impression that the future reference picture is incrementally replacing the past reference picture (Chang: column 12, lines 50-57), as in claim 4.

Art Unit: 2613

Regarding claim 5, the method includes having the first and second predefined transition macroblocks include one or more of: past copy macroblocks which copy a from a past reference picture (Chang: column 14, lines 13-21); future copy macroblocks which copy from a future reference picture (Chang: column 14, lines 22-27); merge macroblocks which average from the past and further reference pictures (Chang: column 13, lines 43-50); offset copy macroblocks which reference the past reference picture (Chang: column 14, lines 13-21; column 13, lines 8-10); offset copy macroblocks which reference the future reference picture future (Chang: column 14, lines 22-27); fading macroblocks which reference a future reference picture and add a non-zero intensity offset to increase or decrease its intensity (Chang: column 8, lines 60-65; column 14, lines 22-27); past fading macroblocks which reference a past reference picture and add a non-zero intensity offset to increase or decrease its intensity (Chang: column 60-65; column 14, lines 13-21), as in the claim.

Chang discloses a wipe (Chang: column 7, lines 45-55; column 12, lines 1-21) transition template suitable for insertion (Chang: figure 2) between a past reference picture and a future reference picture in a compressed digital data stream (Chang: column 7, lines 5-22), the template including: a series of transition pictures including a first transition picture and a last transition picture wherein each transition picture includes a series of rows of macroblocks (Chang: column 12, lines 35-45), each row including a first macroblock and a last macroblock (Chang: column 7, lines 60-67; column 8, lines 1-5); and wherein the majority of the macroblocks are either: past copy macroblocks which copy a from a past reference picture (Chang: column 14, lines 13-21); future copy macroblocks which copy from a future reference picture (Chang: column 14, lines

22-27); merge macroblocks which average from the past and further reference pictures (Chang: column 13, lines 43-50), as in claim 6.

Regarding claims 7-8, Chang discloses that the pictures in the wipe transition are constructed from some PCMs and FCMs (Chang: column 14, lines 15-27), as in the claims.

Regarding claims 9-11, Chang discloses that the regions of PCMs and FCMs are contiguous (Chang: column 12, lines 53-67), as in the claims.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sampath-Kumar discloses a hypervideo system and method with object tracking in a compressed digital video environment. Divakaran discloses methods of scene change detection and fade detection for indexing of video sequences. Mc Gee discloses finding hidden images in video. Wu discloses a method and apparatus for detecting scene changes. Dimatrova discloses a video content detection method and system leveraging data compression constructs. Golin discloses a detection of transitions in video sequences. Zhang discloses a system for automatic video segmentation.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (703)-305-4813. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S. Kelley can be reached on (703)-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2613

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andy S. Rao

Primary Examiner

Art Unit 2613

ANDY RAO

PRIMARY EXAMINER

asr

July 23, 2004